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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,898	01/25/2002	Satoshi Shinada	Q67951	8316

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 03/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,898

Applicant(s)

SHINADA ET AL.

Examiner

Michael P Nghiem

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45 and 50-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45 and 50-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/437,246.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

- "38" (page 29, line 12) should be -- 38a --.

Appropriate correction is required.

Drawings

2. Figures 27 and 28 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP ' 608.02(g).

3. The drawings are objected to because:

- the lead line for reference number 8 is pointing to the wrong element (Fig. 1).

Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 45, 52, 53, and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagasaki et al. (US 6,036,305).

Nagasaki et al. discloses all the claimed features of the invention including:

- an ink supply system (Figs. 5-7) for a printing apparatus (40) providing ink to a printing head (1) through a tapered ink supply needle (2), said ink supply system capable of providing ink contained in an ink chamber (12) to the print head through the ink supply needle (Fig. 5), comprising:

- an ink channel (channel from 15 to 1, Fig. 5) for providing ink from said ink chamber to the print head of the printing apparatus (Fig. 6);

- a first member (19) provided at said ink channel, forming a part of said ink channel for allowing a flow of ink (Fig. 5), said first member sealing the ink supply needle of the ink printing apparatus by fitting therewith (Figs. 5, 6); and

- a second member (18) contained in said ink channel elastically abutting against said first member in a direction which is the same as a direction of the sealing by said first member with said second member (18 seals and abuts 19 in the same direction),

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said second member selectively opening and closing said ink channel in conjunction with the ink supply needle (Figs. 5, 6);

- said second member comprises a surface facing said first member formed with a convex surface (Figs. 5, 6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50, 51, 54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasaki et al. in view of Mitchell et al. (US 4,162,501).

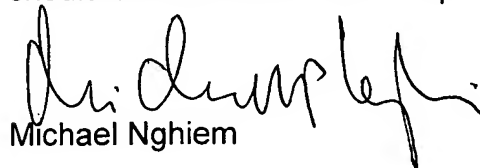
However, Nagasaki et al. does not disclose the following claimed features:

- said first member comprising a protruding rim formed on a surface thereof facing the ink chamber, said protruding rim formed on a surface thereof facing the ink chamber, said protruding rim contacting the ink supply needle of the printing apparatus;
- said first member comprises a hole through which ink flows, said hole being surrounded by said protruding rim, a diameter of said hole is smaller than that of the ink supply needle of the printing apparatus.

Nevertheless, Mitchell et al. discloses a first member (17) comprising a protruding rim (rim of 17, Fig. 6) formed on a surface thereof facing the ink chamber (Fig. 3), said protruding rim contacting an ink supply needle (42) for the purpose of sealing the ink supply needle (Fig. 3), said first member comprises a hole (hole of 17) through which ink flows (ink flows through hole via 42), said hole being surrounded by said protruding rim (Fig. 6), a diameter of said hole is smaller than that of the ink supply needle of the printing apparatus (Fig. 3) for the purpose of providing fluidic communication between an ink chamber and an inkjet head.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Nagasaki et al. with a packing member comprising a rim as disclosed by Mitchell et al. for the purposes of sealing the ink supply needle and providing fluidic communication between an ink chamber and an inkjet head.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-0956.


Michael Nghiem

March 8, 2002